Amendments to the Specification:

1. Please replace paragraph [0028] (p.6, ll. 5-11) with the following amended paragraph:

[0028] The invention provides a method in which a center of mass may be calculated by the steps of: (a) generating a sum result by summing results of a multiplication between ~~a~~ an intensity value of a neighbor pixel and a location coordinate value of the neighbor pixel, for each neighbor pixel; and (b) dividing the sum result by a sum of gradient intensity values of all neighbor pixels. It is noted that a location coordinate value reflects a displacement from either the center of a neighborhood, or the gradient image origin.

A1

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2. Please replace paragraph [0045] (p.9, ll. 20-25) with the following amended paragraph:

[0045] Step 34 is followed by step 38 of estimating at least one relevant edge of an image. The estimation can be done by generating a gradient image, calculating a center of mass, but this is not necessarily so, and prior art methods for edge estimation, such as those described ~~at ????~~ in Ch. 3 of "The image processing handbook" by John C. Russ, CRC press 1994, and other prior art methods can be utilized.

A2

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3. Please replace the Abstract (p.17, ll. 4-18) with the following amended Abstract:

~~The invention provides a~~ A method for generating an enhanced image~~, the method including~~ includes the steps of: (a) receiving a matrix of pixels representative of an image; (b) generating a gradient image representative of a difference between values of adjacent pixels; (c) calculating a center of mass for each pixel of the gradient image in response to gradient intensity values and location values of neighboring pixels; and (d) generating an enhanced image by modifying intensity values of pixels of the matrix of pixels that are located in a vicinity of local centers of mass in response to intensity values of pixels that are further displaced from the local centers of mass.

~~The invention provides a method for generating an enhanced image, the method including the steps of: (a) receiving a matrix of pixels representative of an image; (b) estimating at least one edge of the image; and (c) generating an enhanced image by modifying intensity values of pixels of the matrix of pixels that are located in a vicinity of the at least one estimated edge in response to intensity values of pixels that are further displaced from the at least one edge.~~